

**BUREAU OF RECLAMATION  
CATEGORICAL EXCLUSION CHECKLIST**

Mid-Pacific Region  
Lahontan Basin Area Office

**Project Name:** Boca Safety of Dams (SOD) Geologic Field Investigations

**CEC Number:** LO – 2010-1020 Supplemental

**Cost Authority:** A50-1547-0002-002-41-0-8

**Date:** October 9, 2012

**EXCLUSION CATEGORY**

*516 DM 14.5 B.3* – Data collection studies that involve test excavations for cultural resources investigations or test pitting, drilling, or seismic investigations for geologic exploration purposes where the impacts will be localized.

**NATURE OF ACTION**

LBAO is proposing to authorize structural, geologic field investigations on Reclamation land downstream of the Boca Dike.

The purpose of this exploration is to further analyze conditions at the dam in order to develop designs that will best mitigate seismic issues that have been previously identified. These investigations and any subsequent modification are being carried out under Reclamation's Safety of Dams program. The proposed investigations would allow data to be collected on subsurface soil properties, including soil samples for laboratory testing.

**PROJECT DESCRIPTION**

This supplemental CEC has been prepared to evaluate additional geologic field investigations for the Boca Safety of Dams (SOD) project. The original Boca SOD Geologic and Seismotectonic Field Investigations CEC (LO-2010-1020) was prepared by the Lahontan Basin Area Office (LBAO) and reviewed by United States Bureau of Reclamation, Mid-Pacific Region Cultural Resources Staff (11-MPRO-265.1), Indian Trust Assets Staff, and LBAO Decision Makers and, no negative impacts to the environment were identified. The original CEC was approved and signed June 7, 2012.

The planned investigation includes using a backhoe to excavate two test pits (TP-3 and TP-4) on the bench, downstream of the Boca Dike (see Figure 2).

Two test pits would be excavated with a rented CAT 235 or equivalent tracked excavator. Each test pit would be approximately 15 feet deep x 4 feet wide x 20 to 30 feet long.

Both test pits (TP3 and TP4) would extend to the bottom of the Tahoe Outwash, Qto1 geologic unit. Geologic logging and sampling would be performed in each test pit. For these activities, water is not required. To determine soil density, one ring density test will be performed in each test pit. Less than 50 gallons of water would be used to perform each ring density test and will be gradually discharged onto the ground surface following the completion of each test.

As currently planned, personnel will not enter the test pits. Water will be discharged onto the ground surface at least 200' away from the Little Truckee River and allowed to evaporate and/or infiltrate. Material excavated from a test pit (soil and weathered rock) will be used to backfill the test pit. Surface material will be stockpiled and replaced back into each test pit to complete the backfilling. The work area will be "raked" and smoothed with the excavator as a final clean-up. The ground surface will be restored to its previous condition and elevation and exposed soil will be seeded with native grasses upon project completion.

Equipment and personnel will access the project area using the existing dirt roads. All equipment will be washed prior to entering the site to prevent the spread of invasive plant species.

## **ENVIRONMENTAL AND PERMITTING**

The Little Truckee River will be maintained to flow at approximately 39 cubic feet per second (cfs) or as determined by the Federal Court appointed Watermaster.

It has been determined that the Boca Dam Geologic Field Investigations will have *No Effect* to any threatened or endangered species or their designated critical habitats protected under the Federal Endangered Species Act of 1973 therefore, no review or consultation by the USFWS is required.

The proposed geotechnical investigations will have *No Effect* to the American Bald Eagle. Under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act, no review or consultation by the USFWS is required.

This project is exempt from obtaining a Section 404 permit of the Clean Water Act, because geotechnical activities will not be conducted within waters of the United States and material will not be discharged into Navigable waters of the United States.

This project is exempt from obtaining a Section 402 National Pollutant Discharge Elimination System (NPDES) permit of the Clean Water Act, because project activities will not result in the disturbance of more than 1 acre of land.

This project is exempt from obtaining a Section 401 permit of the Clean Water Act, because

there will be no discharges of pollutants to surface waters.

Best Management Practices (BMPs) and mitigation measures will be deployed to the maximum extent practicable to minimize any potential soil erosion/or surface runoff problems.

### **FIRE SUPPRESSION**

The Bureau of Reclamation shall take all of the steps necessary to prevent his/her employees, subcontractors and their employees from setting fires and shall be responsible for preventing the escape of fires set directly or indirectly as a result of operations. If a fire were to occur, the first step would be to call the emergency number 911.

The Forest Service will provide a recording for Reclamation to call in daily to check Project Level Activity (PAL) emergency precautions for operations. To obtain the predicted PAL, Reclamation is to call 530-587-2158 before starting work each day. All work will be in compliance with applicable USFS regulations. "Restricted work hour days" and "no work days" will be observed when in effect. Refer to Section 5 of the 2009 Fire Plan for the Stampede and Boca Reservoirs Geologic Investigations for details regarding PAL requirements.

The Fire Precautionary Period is May 1, 2012 to December 1, 2012.

Reclamation shall equip each operating tractor and any other internal combustion engine with a spark arrester, except for motor vehicles equipped with a maintained muffler. Spark Arresters shall be a model tested and shall be maintained in good operating condition.

Fire tools kept at the site shall be sufficient to equip all employees in the field exploration project. USFS required fire suppression equipment will be provided at each test pit and drill hole site whenever work is in progress. Minimum equipment will include:

- 300 gallon water tank
- Generator and pump
- 100-foot fire hose
- Spray nozzle

For further details and Fire Plan guidelines, the 2009 Fire Plan for the Stampede and Boca Reservoirs Geologic Investigations is incorporated by reference.

### **TIMELINE**

The window for the proposed geotechnical investigation is expected to occur between October 15, 2012 and November 2, 2012 and is anticipated to take approximately 2 days. All work will be during daylight hours (7am to 7pm).

**LOCATION**

The project site is located at Boca Dam, Nevada County, California. Boca Dam is located in the Sierra Nevada Mountains, approximately 6.5 miles northeast of the town of Truckee, California and 18 miles southwest of Reno, Nevada (see Figure 1).

**Legal Description:** Section 21, T18N, R17E M.D.M

<b>Evaluation of Criteria for Categorical Exclusion</b>	
1. This action would have a significant effect on the quality of the human environment. (40 CFR 1502.3).	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>
2. This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2) (E) and 43 CFR 46.215 (c)].	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>
3. This action will have significant impacts on public health or safety (43 CFR 46.215(a)).	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>
4. This action would have significant impacts such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principle drinking water aquifers; prime farmlands; wetlands (E.O.11990); floodplains (E.O. 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)).	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>
5. The action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risk (43 CFR 46.215 (d)).	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>
6. This action would establish a precedent for future actions or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)).	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>
7. This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)).	No <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Yes <input type="checkbox"/>

<b>Evaluation of Criteria for Categorical Exclusion</b>	
8. This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau (in coordination with a Reclamation cultural resources professional, RM LND 02-01 D(1)(a)) (43 CFR 46.215 (g)).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___
9. This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species (43 CFR 46.215 (h)).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___
10. This action would violate a Federal, State, local, or tribal law or requirement imposed for protection of the environment (43 CFR 46.215 (i)).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___
11. This action would have a disproportionately high and adverse effect on low income or minority populations (E.O. 12898) (43 CFR 46.215 (j)).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___
12. This action would limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (E.O. 13007 and 43 CFR 46.215 (k)).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___
13. This action would affect Indian Trust Assets. (To be completed by Reclamation official responsible for ITAs) (S.O. 3175; Policy Memorandum dated 12/15/93).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___
14. This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act, E.O. 13112, and 43 CFR 46.215 (l)).	No <input checked="" type="checkbox"/> Uncertain ___ Yes ___

**NEPA Action Recommended:** Categorical Exclusion  EA \_\_\_ EIS \_\_\_

**Environmental commitments, explanation, and/or remarks:**

See the attached correspondence from the Mid-Pacific Region Cultural Resources Division regarding concurrence with Item 8 (cultural resources), and from Patricia Rivera regarding Item 13 (Indian Trust Assets).

Prepared by: Joel F. Stum  
Joel Stum  
Geologist, MP-230

10-9-12  
Date

Recommended: Julia Long  
Julia Long  
Natural Resource Specialist

10-15-12  
Date

Concurrence: Robert Edwards  
Robert Edwards  
Resource Division Manager

10/24/2012  
Date

Approved: Terri Edwards  
Terri Edwards  
Deputy Area Manager

10/24/12  
Date

V:\GIS\BAC Activity\LO-2010-1020 BOR BOCA SOD\NEPA-Geotech\GIS\Boca Geotech.mxd | Printed On: 9/20/2012 | jmoore



**RECLAMATION**  
*Managing Water in the West*

**Boca Reservoir Project Area**  
SOD Geologic Field Investigations

Lahontan Basin Area Office  
705 N. Plaza Street, Carson City, NV 89701



Figure 1  
LO-2010-1020 Supplemental



**RECLAMATION**  
*Managing Water in the West*

Lahontan Basin Area Office  
705 N. Plaza Street, Carson City, NV 89701



**Boca Reservoir Project Area**

SOD Geologic Field Investigations

Test Pit Locations

Figure 2

LO-2010-1020 Supplemental

**From:** Rivera, Patricia L  
**Sent:** Monday, September 24, 2012 6:28 AM  
**To:** Long, Julia A  
**Subject:** RE: ITA review

Julia,

I reviewed the proposed action to authorize structural, geologic field investigations on Reclamation land downstream of the Boca Dike.

A supplemental CEC has been prepared to evaluate additional geologic field investigations for the Boca Safety of Dams (SOD) project. The original Boca SOD Geologic and Seismotectonic Field Investigations CEC (LO-2010-1020) was prepared by the Lahontan Basin Area Office (LBAO) and reviewed by United States Bureau of Reclamation, Mid-Pacific Region Cultural Resources Staff (11-MPRO-265.1), Indian Trust Assets Staff, and LBAO Decision Makers and, no negative impacts to the environment were identified. The original CEC was approved and signed June 7, 2012.

The planned investigation includes using a backhoe to excavate two test pits (TP-3 and TP-4) on the bench, downstream of the Boca Dike.

Test pits would be excavated with a rented CAT 235 or equivalent tracked excavator. Each test pit would be approximately 15 feet deep x 4 feet wide x 20 to 30 feet long. A test pit will be excavated at only one of these locations.

Both test pits (TP3 and TP4) would extend to the bottom of the Tahoe Outwash, Qtoa1 geologic unit. Geologic logging and sampling would be performed in each test pit. For these activities, water is not required. To determine soil density, a ring density test may be required in TP-3 only. If this is required, less than 50 gallons of water would be used to perform this test and will be gradually discharged onto the ground surface throughout the performance of the test.

As currently planned, personnel will not enter the test pits. Water will be discharged onto the ground surface and least 200' away from the Little Truckee River and allowed to evaporate and/or infiltrate. Material excavated from a test pit (soil and weathered rock) will be used to backfill the test pit. Surface material will be stockpiled and replaced back into each test pit to complete the backfilling. The work area will be "raked" and smoothed with the excavator as a final clean-up. The ground surface will be restored to its previous condition and elevation and exposed soil will be seeded with native grasses upon project completion.

Equipment and personnel will access the project area using the existing dirt roads. All equipment will be washed prior to entering the site to prevent the spread of invasive plant species.

## TIMELINE

The window for the proposed geotechnical investigation is expected to occur between October 15, 2012 and November 2, 2012 and is anticipated to take approximately 2 days. All work will be during daylight hours (7am to 7pm).

The proposed action does not have a potential to affect Indian Trust Assets. The nearest ITA is Reno-Sparks Colony approximately 19 miles NE of the project location.

Patricia

**From:** [Soule, William E](#)  
**To:** [Long, Julia A](#)  
**Subject:** RE: Most current Boca CEC Supplemental  
**Date:** Wednesday, October 24, 2012 9:30:09 AM

---

Julia:

RE: 11-MPRO-265.1 Boca Dam SOD Geotechnical Studies

Based on my review of the most recent change in geotechnical trench locations, our earlier determination of No Adverse Effect, in consultation with the SHPO, is still valid and I concur with item 8 in the Supplemental CEC for this undertaking.

Bill

William E. Soule, M.A., Archaeologist  
U.S. Bureau of Reclamation, Mid-Pacific Region  
2800 Cottage Way, MP-153  
Sacramento, CA 95825  
Phone: 916-978-4694  
Email: [wsoule@usbr.gov](mailto:wsoule@usbr.gov)

---

**From:** Long, Julia A  
**Sent:** Wednesday, October 24, 2012 9:12 AM  
**To:** Soule, William E  
**Subject:** RE: Most current Boca CEC Supplemental

I just need your determination via email. You don't need to sign the CEC.

Thank you,  
Julia

---

**From:** Soule, William E  
**Sent:** Tuesday, October 23, 2012 10:08 AM  
**To:** Long, Julia A  
**Subject:** FW: Most current Boca CEC Supplemental

Julia:

By the way, I am not on the signature page.

Bill

---

**From:** Soule, William E  
**Sent:** Tuesday, October 23, 2012 10:04 AM  
**To:** Long, Julia A  
**Subject:** RE: Most current Boca CEC Supplemental

Julia:

I apologize for the lateness in getting back to you on this. Do you need an actual hand-signed mailed copy, or can I just sign the document, scan it, and email that?

Bill

William E. Soule, M.A., Archaeologist  
U.S. Bureau of Reclamation, Mid-Pacific Region  
2800 Cottage Way, MP-153  
Sacramento, CA 95825  
Phone: 916-978-4694  
Email: [wsoule@usbr.gov](mailto:wsoule@usbr.gov)

---

**From:** Long, Julia A  
**Sent:** Tuesday, October 09, 2012 2:22 PM  
**To:** Sturm, Joel F; Soule, William E  
**Subject:** Most current Boca CEC Supplemental

I got the map and narrative updated for the Boca CEC Supplemental NEPA document. Please see attached. Joel, not sure if you already signed and mailed the signature page on the last copy you received. If so, I can just insert that page into this more current document. If you haven't signed it yet, print this version out, sign and mail it to me.

Thank you,

Julia Long  
Natural Resources Specialist  
Lahontan Basin Area Office  
Bureau of Reclamation  
705 North Plaza St. Suite 320  
Carson City, NV 89701  
Ph: 775-884-8372  
Fax: 775-882-7592  
[jlong@usbr.gov](mailto:jlong@usbr.gov)